EXECUTIVE SUMMARY

The following report is a Multimodal Transportation Assessment (MMTA) for the Bingham Center development in Arlington, Virginia.

Site Location and Study Area

The proposed development site is located in the Clarendon area of Arlington, Virginia and is bounded by 10th Street N to the south, Wilson Boulevard to the west, Washington Boulevard to the north, and N Irving Street to the east as shown in Figure 2. The general extents of the study area are N Kirkwood Road to the west, Washington Boulevard to the east, N Highland Street to the north, and 10th Street N to the south.

The vehicular study area consists of 12 intersections along Washington Boulevard and 10th Street N, as vetted and approved by Arlington County.

The site is currently occupied by multiple retail businesses and a surface parking lot. This site is currently zoned C-3: General Commercial District and is shown as a medium density land use in the General Land Use Plan (GLUP).

Proposed Project

The proposed mixed-use development will include two buildings with a total of approximately 286 residential dwelling units and approximately 16,169 sf of ground floor retail and a hotel with 224 rooms.

The proposed development will provide approximately 311 parking spaces in a below-grade parking garage. Vehicular access to the site will utilize a new tertiary road, 10th Road W, which connects Wilson Boulevard and N Irving Street and a new Proposed Alley between the proposed 10th Road W and 10th Street N. Parking and loading access will also be provided via the Proposed Alley and N Irving Street.

The proposed development will provide one (1) 40-foot loading berth for the hotel building and one (1) 25-foot and one (1) 40-foot loading berth for the residential building. The number of loading facilities on-site will accommodate the practical needs of the development.

Policies and Goals

The Arlington County Master Transportation Plan (MTP), adopted in 2011 and updated in 2019, outlines goals to improve various modes of transportation throughout the County. Similarly, the Clarendon Sector Plan, adopted by the County Board in 2010, developed a series of goals and objectives specifically for the Clarendon area. The Bingham Center development achieves several of the goals and policies of both the MTP, Sector Plan, and other guiding documents for the County.

Multi-Modal Overview

Transit

The subject site is well-served by transit:

- There are eight (8) bus stops within ¼-mile of the site. These stops are directly served by WMATA (Metrobus), Arlington Transit (ART), and OmniRide routes.
- The site is located 0.2 miles from the Clarendon Metro station, which serves the Orange and Silver lines.

Bus stops adjacent to the site are well used, with the WMATA Route 38B seeing the highest boardings and alighting at bus stops near the site. Ridership information for ART buses were not available.

Pedestrian

The site is surrounded by a well-connected pedestrian network. The pedestrian facilities around the site provide a quality walking environment. There are certain locations with sidewalk width deficiencies, but overall, there is good connectivity and quality infrastructure.

A number of planned and approved projects will improve pedestrian infrastructure and connectivity in the vicinity of the proposed development. This includes improvements to sidewalks and streetscape as part of the Wilson Boulevard Streetscape Improvements project and adding crosswalks and shortening existing crosswalks on Washington Boulevard as part of the Washington Boulevard & 13th Street N Improvements project.

The proposed development will reduce deficiencies by adding new sidewalks adjacent to the site, along the newly proposed alley and proposed tertiary road (10th Road West) and providing improved sidewalk and streetscape features throughout the site.

Bicycle

The site has access to several on- and off-street bicycle facilities, including the Custis Trail which travels along Custis Memorial Parkway and bike lanes on N Kirkwood Road, Fairfax Drive, Wilson Boulevard, and Clarendon Boulevard. There are also signed bicycle routes on N Hartford Street, portions of N Kirkwood Street, N Jackson Street, Key Boulevard, 14th Street N, and N Lincoln Street.

Several of the existing bike facilities have been identified by the Arlington Master Transportation Plan and Clarendon Sector Plan to be upgraded in the future. This includes developing enhanced bike facilities on N Highland and N Herndon Streets, between Key Boulevard and 7th Street N and on 10th Street N between Fairfax Drive and the Arlington Boulevard Trail, upgrading the existing bicycle lanes on Wilson Boulevard and Clarendon Boulevard, and enhancing the bicycle lanes on Fairfax Drive between N Glebe Road and Washington Boulevard.

Vehicular

The site is accessible from several principal arterials such as Wilson Boulevard and 10th Street N. The arterials create connections to I-66 and ultimately the Capital Beltway (I-495) that surrounds Washington, DC and its inner suburbs as well as regional access to I-95. These principal arterial roadways bring vehicular traffic within one mile of the site, at which point minor arterials, collectors, and local roads can be used to access the site directly.

Existing Conditions

Intersection capacity analyses were performed for the morning and afternoon peak hours at study area intersections. Synchro version 10 was used to analyze the study intersections based on the *Highway Capacity Manual* (HCM) 2000 methodology.

The existing conditions analysis shows that many intersections and movements operate at an acceptable level of service during the morning and afternoon peak hours. However, of the 12 intersections in the study area, one (1) intersection has one or more movements that operate at levels beyond Level of Service (LOS) E or better in one or more peak hour. LOS E is typically used as the acceptable LOS threshold in the County; although LOS F is generally accepted in urbanized areas if vehicular improvements would be a detriment to safety or to non-auto modes of transportation. The capacity analysis results also show that six (6) intersections have 95th percentile queues that exceed the available storage length in one or more peak hour in existing conditions.

Travel Demand Assumptions

Mode split (also called mode share) is the percentage of travelers using a particular type (or mode) of transportation when traveling. The mode split information for this report was based on Census data using Traffic Analysis Districts (TADs), WMATA Ridership Survey and Arlington County Mode Share Assumptions for Clarendon/Courthouse area. The following mode splits were assumed in the analysis, as vetted and approved by Arlington County:

- Residential
  - Auto – 39%, Transit – 52%, Bike/Walk – 9%, Telecommute/TNC/Other – 0%
- Neighborhood-Serving Retail
  - Auto – 20%, Transit – 30%, Bike/Walk – 50%, Telecommute/TNC/Other – 0%
- Hotel
  - Auto – 22%, Transit – 34%, Bike/Walk – 19%, Telecommute/TNC/Other – 25%

Weekday peak hour trip generation is calculated based on the methodology outlined in the Institute of Transportation Engineers' (ITE) Trip Generation, 10th Edition.

Residential trip generation is based on the development program of 286 dwelling units using ITE's baseline vehicular trips for Land Use Code 222 (Multifamily Housing High-Rise), using the setting/location of General Urban/Suburban, splitting trips into different modes using assumptions outlined in the mode split section of this report.

Neighborhood retail trip generation is based on the development program of 16,169 square feet of neighborhood-serving ground floor retail. Retail trip generation was calculated based on ITE's baseline vehicular trips for Land Use Code 820 (Shopping Center), using the setting/location of General Urban/Suburban, splitting trips into different modes using assumptions outlined in the mode split section of this report.

Hotel trip generation is based on the development program of 224 rooms using ITE's baseline vehicular trips for Land Use Code 310 (Hotel), using the setting/location of General Urban/Suburban, splitting trips into different modes using assumptions outlined in the mode split section of this report.

Future Improvements

A number of planned transportation improvements in the vicinity of the Bingham Center are expected to be complete by 2024. The full list of improvements is detailed in the report, but examples include:

- Wilson & Washington Boulevard Intersection Improvements (Clarendon Circle)
- Washington Boulevard & 13th Street N Improvements
- Wilson Boulevard Streetscape Improvements (Clarendon Area)

Future Traffic Operations

A capacity analysis was developed to compare the future roadway network without the proposed development to the future roadway network with the proposed development. Intersection capacity analyses were performed for the morning and afternoon peak hours at study area intersections. Synchro version 10 was used to analyze the study intersections based on the *Highway Capacity Manual* (HCM) 2000 methodology.

Traffic projections for 2024 are based on existing volumes, plus traffic generated by approved nearby background developments to account for local growth, regional growth, removed existing site trips, and traffic generated by the proposed Bingham Center development.

Mitigations

Mitigation measures were identified based on Arlington County standards and as outlined in the approved scoping document. The proposed development is considered to have an impact at an intersection if any of the following conditions are met:

- The overall intersection or any movement operates at LOS F in the future conditions with the proposed development where it operates at LOS E or better in the background conditions without the proposed development.
- The overall intersection or any movement operates at LOS F during the background condition and the delay increases by more than 10% in the future conditions with the proposed development; or
- If any 95th percentile queue length in the future condition exceeds the available capacity and increases by more than 150 feet compared to background conditions.

Following these guidelines, there are impacts to two (2) intersections as a result of the proposed development in the 2024 analysis year. Mitigation measures were explored at these intersections, and included the following recommendations:

- Adjustments to signal timing at two (2) intersections

With these mitigations in place, the analysis shows that traffic operations with proposed development are consistent with the background scenarios at the study intersections.

Transportation Management Plan

A Transportation Management Plan (TMP) will be provided for the project based on the County's requirements, and a framework for a TMP is included in this report. This TMP will include typical components such as the establishment of a TMP coordinator, the distribution of transit literature, the establishment of ride-sharing programs, and the on-site sale of discounted fare media. Management measures taken by the Bingham Center project can be monitored and adjusted as needed to continually create opportunities to reduce the amount of vehicular traffic generated by the site.

Summary and Recommendations

This report concludes that the proposed development will not have a detrimental impact to the surrounding transportation and roadway network, assuming that all planned site design elements and recommended mitigation measures are implemented.

The development has many positive elements contained within its design that minimize potential transportation impacts, including:

- The proposed development's close proximity to the Clarendon Metro Station and multiple bus lines.
- Improvements to the pedestrian facilities adjacent to the site that meet or exceed Arlington County and ADA requirements.
- The inclusion of secure-long-term bicycle parking that meet zoning requirements.
- The installation of short-term bicycle parking spaces around the perimeter of the site that meet zoning requirements.
- The inclusion of shower and locker facilities within each building.
- A Transportation Management Plan (TMP) that aims to reduce the demand of single-occupancy, private vehicles to/from the proposed development during peak period travel times or shifts single-occupancy vehicular demand to off-peak periods.